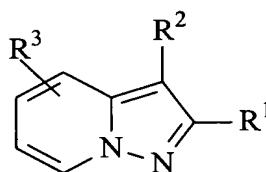


IN THE CLAIMS

1-36 (Cancelled)

37. (Previously Presented) A pharmaceutical composition comprising an adenosine A_1A_{2a} -receptor dual antagonist in a form and amount sufficient to prevent and/or treat Parkinson's Disease or the concomitant symptoms of Parkinson's Disease.

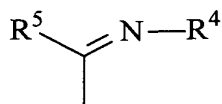
38. (Previously Presented) The pharmaceutical composition claimed in Claim 37, wherein the adenosine A_1A_{2a} -receptor dual antagonist is a pyrazolopyridine compound, or a salt thereof, of the formula:



wherein R^1 is a lower alkyl, a substituted aryl an unsubstituted aryl, or a heterocyclic group;

wherein R^2 is:

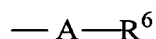
a group of the formula:



wherein R^4 is a protected amino or a hydroxy and R^5 is hydrogen or a lower alkyl;

a cyano,

a group of the formula:



wherein R^6 is an acyl and A is a substituted lower aliphatic hydrocarbon group
or an unsubstituted lower aliphatic hydrocarbon group;

an amidated carboxy,

a substituted unsaturated heterocyclic group or an unsubstituted heterocyclic group,

an amino, or

a protected amino; and

wherein R^3 is hydrogen, a lower alkyl, a lower alkoxy, or a halogen.

39 (New): A method for the treatment of Parkinson's disease and the prevention and/or treatment of anxiety, depression and memory impairment that are the concomitant symptoms thereof comprising:

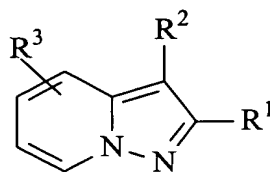
administering to a subject in need thereof an effective dose of an adenosine A_1A_{2a} -receptor dual antagonist,

wherein the affinity for the adenosine A_1 -receptor of the adenosine A_1A_{2a} -receptor dual antagonist is 0.25 to 40 times greater than that for the adenosine A_{2a} -receptor.

40 (New): The method of Claim 39, wherein said adenosine A_1A_{2a} -receptor dual antagonist is selected from the group consisting of adenine, a barbiturate, a benzimidazole, a

benzo[1,2-c:5,4-c']dipyrrole, a benzo[b]furan, a benzo[g]pteridine-2,4-dione, a β -carboline, a dibenz[b,f]azepine, a flavone, an imidazo[1,2-a]pyrazine, an imidazo[4,5-b]pyridine, an imidazo[4,5-c]quinoline, an imidazo[4,5-e][1,4]diazepine-5,8-dione, an imidazo[4,5-f]quinazoline-7,9-dione, an imidazo[4,5-g]quinazoline-6,8-dione, an imidazo[1,2-a]quinoxaline, an imidazoline, an imidazotriazolopyrimidine, a pteridine-2,4-dione, a pyrazole, a pyrazolo[1,5-a]pyridine, a pyrazolo[1,5-a]pyridine, a pyrazolo[3,4-b]pyridine, pyrazolo[3,4-d]pyrimidine, a pyrazolo[4,3-d]pyrimidine, a pyrazolo[4,3-c]quinoline, a pyrimidine, a pyrimido[4,5-b](tetrahydro)indole, a pyrrolo[2,3-d]pyrimidine, a quinazoline, a quinoline, a thiazolo[3,2-a]pyrimidine, a thiazolo[2,3-b]quinazoline, a thiazolo[4,5-d]pyrimidine-5,7-dione, a thiazolo[5,4-d]pyrimidine-5,7-dione, a thiophene, a triazolo[3,2-a][2,7]naphthyridine, a triazolopurine, a [1,2,4]triazolo[4,3-b]pyridazine, a triazolo[1,5-a]pyrimidine, a triazolo[1,5-c]pyrimidine, a [1,2,4]triazolo[1,5-c]quinazoline, a [1,2,4]triazolo[4,3-a]quinoxaline, triazolo[1,5-a]triazine, a xanthine, a mesoionic xanthine.

41 (New): The method of Claim 39, wherein the adenosine A_1A_{2a} -receptor dual

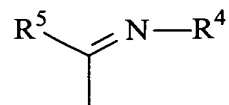


antagonist is a pyrazolopyridine compound, or a salt thereof, of the formula:

wherein R¹ is a lower alkyl, a substituted aryl, an unsubstituted aryl, or a heterocyclic group;

wherein R^2 is:

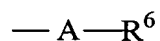
a group of the formula:



wherein R^4 is a protected amino or a hydroxy and R^5 is hydrogen or a lower alkyl;

cyano;

a group of the formula:



wherein R^6 is an acyl and A is a substituted lower aliphatic hydrocarbon group or an unsubstituted lower aliphatic hydrocarbon group;

an amidated carboxy;

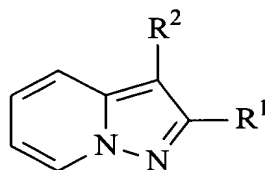
a substituted unsaturated heterocyclic group or an unsubstituted heterocyclic group;

amino; or

a protected amino; and

wherein R^3 is hydrogen, a lower alkyl, a lower alkoxy, or a halogen.

42 (New): The method of Claim 39, wherein the adenosine A_1A_{2a} -receptor dual antagonist is a pyrazolopyridine compound of the formula:



wherein R¹ is an unsubstituted aryl or a halogen substituted aryl and

R² is a dihydropyridazinyl group having a lower alkyl optionally substituted by an unsaturated 3~8-membered monocyclic heterocyclic group containing 1 or 2 sulfur atom(s) and 1~3 nitrogen atoms or acyl(lower)alkyl and oxo; dihydropyridazinyl group having cyclo(lower)alkyl substituted by acyl(lower)alkyl or acyl(lower)alkylidene and oxo; or dihydropyridazinyl having cyclo(lower)alkenyl substituted by acyl(lower)alkyl or acyl(lower)alkylidene and oxo.

43 (New): The method of Claim 39, wherein

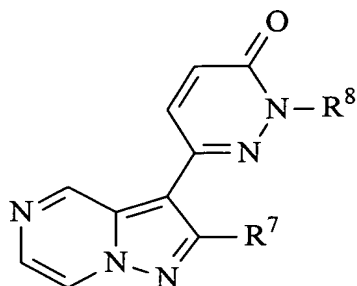
R¹ is an unsubstituted phenyl or a halogen substituted phenyl, and

R² is a 3-oxo-2,3-dihydropyridazinyl group having a thiazolyl(lower)alkyl group or a 3-oxo-2,3-dihydropyridazinyl group having a lower alkyl.

44 (New): The method of Claim 39, wherein the adenosine A₁A_{2a}-receptor dual antagonist is

3-[2-(thiazol-2-ylmethyl)-3-oxo-2,3-dihydro-pyridazin-6-yl]-2-phenylpyrazolo[1,5-a]pyridine.

45 (New): The method of Claim 39, wherein the adenosine A₁A_{2a}-receptor dual antagonist is a pyrazolopyrazine compound, or a salt thereof, of the formula:



wherein R⁷ is a substituted aryl or an unsubstituted aryl; and

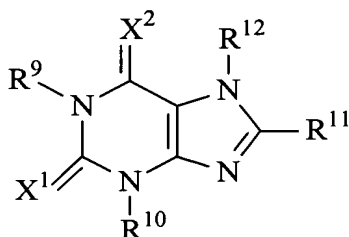
R⁸ is hydrogen, a lower alkyl, a cyclo(lower)alkyl, a lower alkyl substituted by a cyclo(lower)alkyl, an ar(lower)alkyl, a heterocyclic group, or a lower alkyl substituted by a heterocyclic group.

46 (New): The method of Claim 45, wherein

R⁷ is an unsubstituted phenyl or a halogen substituted phenyl, and

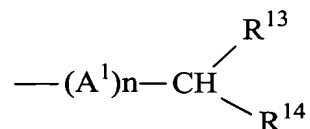
R⁸ is a lower alkyl or a heterocyclic group.

47 (New): The method of Claim 39, wherein the adenosine A₁A_{2a}-receptor dual antagonist is a compound, or a salt thereof, of the formula:



wherein R^9 , R^{10} and R^{12} each is a hydrogen, a substituted lower aliphatic hydrocarbon group, an unsubstituted lower aliphatic hydrocarbon group, a substituted higher alkyl, an unsubstituted higher alkyl, a substituted ar(lower)alkyl, or an unsubstituted ar(lower)alkyl;

R^{11} is hydrogen, a substituted alicyclic group, an unsubstituted alicyclic group, a substituted aryl, an unsubstituted aryl, a substituted heterocyclic group, an unsubstituted heterocyclic group, a substituted alicyclic(lower)alkyl, an unsubstituted alicyclic(lower)alkyl, a substituted ar(lower)alkyl, an unsubstituted ar(lower)alkyl, a substituted heterocyclic(lower)alkyl, an unsubstituted heterocyclic(lower)alkyl, or a group of the formula:



wherein R^{13} and R^{14} each is an unsubstituted alicyclic group, a substituted alicyclic group, an unsubstituted aryl, or a substituted aryl;

A^1 is a lower alkylene; and

n is 0 or 1; and

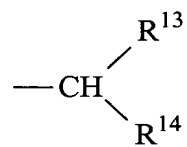
X^1 and X^2 each is an oxygen atom or a sulfur atom

and salts thereof.

48 (New): The method of Claim 47, wherein

R^9 and R^{10} are each lower alkyl,

R^{11} is an unsubstituted cyclo(C_3 - C_8)alkyl or an oxo substituted cyclo (C_3 - C_8) alkyl, a (C_7 - C_{12}) tricycloalkyl, or a group of the formula:



wherein R^{13} and R^{14} are each a cyclo ($\text{C}_3\text{-C}_8$) alkyl;

R^{12} is hydrogen; and

X^1 and X^2 are each an oxygen atom.